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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GERT CALLIES, TILMANN SCHMIDT-SANDTE, and
THOMAS WAWRA

Appeal 2008-1284
Application 10/798,116
Technology Center 3700

Decided: July 28, 2008

Before JOSEPH F. RUGGIERO, ROBERT E. NAPPI, and JOHN A.
JEFFERY, *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 6(b) of the final
rejection of claims 9, 11, and 13 through 16.

We affirm the Examiner's rejections of these claims.

INVENTION

The invention is directed to a method of removing vapor or plasma created during the laser drilling of a workpiece. See page 2 of Appellants' Specification. Claim 9 is representative of the invention and reproduced below:

9. A device for laser drilling and laser erosion comprising:
a laser for generating a laser beam acting upon a point of action on a workpiece;
a device for generating an electric field in an area of the point of action, wherein the device for generating the electric field includes an electrode and a current-voltage source, the electrode being situated at a distance from the point of action, the current-voltage source being interconnected between an electrically conductive workpiece and the electrode in such a way that the electric field is applied between the workpiece and the electrode, and wherein the workpiece and the electrode are interconnected in such a way that the workpiece is positively charged and the electrode is negatively charged.

REFERENCES

Asahi	JP 6-684 A	Jan. 11, 1994
Ohara	JP 7-266073 A	Oct. 17, 1995
Goto	JP 8-155670 A	June 18, 1996

REJECTIONS AT ISSUE

Claims 9, 11, and 14 through 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated over Goto. The Examiner's rejection is on page 3 of the Answer.

Claims 9, 11, and 14 through 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated over Asahi. The Examiner's rejection is on page 3 of the Answer.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Goto in view of Ohara. The Examiner's rejection is on page 4 of the Answer.

Throughout the opinion, we make reference to the Brief (received November 17, 2006), Reply Brief (received May 25, 2007) and the Answer (mailed March 20, 2007) for the respective details thereof.

ISSUE

Rejections under 35 U.S.C. § 102(b).

Appellants argue on pages 3 and 4 of the Brief that the Examiner's anticipation rejections of claims 9, 11, and 14 through 16 are in error. Appellants reason that Goto teaches that the workpiece is not electrically connected to the current source. Brief 3. Further, Appellants argue that Asahi "does not disclose the current-voltage source being interconnected between an electrically conductive workpiece and the electrode." Rather, Appellants assert that Asahi teaches "the current-voltage source being interconnected between two electrodes." Brief 4. Appellants assert that "[t]he present invention avoids the potential problems with bad mechanical or electrical contacts between the workpiece and electrode by having the workpiece itself being directly connected to the current voltage source and the workpiece." Brief 4.

Thus, Appellants' contentions with respect to the anticipation rejections present us with the issue of whether the Examiner erred in finding

that both Goto and Asahi teach the workpiece being electrically interconnected to the current-voltage source as claimed.

Rejections under 35 U.S.C. § 103(a).

Appellants argue on page 5 of the Brief that the Examiner's obviousness rejection of claim 13 is in error. Appellants reason that claim 13 is dependent upon claim 9, and the additional teachings of Ohara do not overcome the deficiency in the rejection of claim 9 based upon Goto. Brief 5.

Thus, Appellants' contentions with respect to the rejection of claim 13, present us with the same issues as discussed with respect to the rejections based upon 35 U.S.C. § 102(b).

PRINCIPLES OF LAW

Office personnel must rely on Appellant's disclosure to properly determine the meaning of the terms used in the claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995). "[I]nterpreting what is *meant* by a word *in* a claim 'is not to be confused with adding an extraneous limitation appearing in the specification, which is improper.'" *In re Cruciferous Sprout Litigation*, 301 F.3d 1343, 1348, (emphasis in original) (citing *Intervet Am., Inc. v. Kee-Vet Labs., Inc.*, 887 F.2d 1050, 1053 (Fed. Cir. 1989)).

37 C.F.R. § 41.37 (c)(1)(vii) states:

For each ground of rejection applying to two or more claims, the claims may be argued separately or as a group. When multiple claims subject to the same ground of rejection are argued as a group by appellant, the Board may select a single claim from the group of claims that are argued together to

decide the appeal with respect to the group of claims as to the ground of rejection on the basis of the selected claim alone. Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately.... A statement which merely points out what a claim recites will not be considered an argument for separate patentability of the claim.

FINDINGS OF FACT

1. Goto teaches a system for efficiently removing the machining residue from a workpiece machined with a pulse-like laser. Para. 0009 of translation.
2. The system involves placing the workpiece in the vicinity of an electric field. The electric field is created by a power supply which powers electrodes. The system also includes a detector to determine the charge particles discharged from the workpiece during machining. Goto, para. 0010 of translation.
3. The workpiece is mounted on a base electrode. Goto, para. 0018 of translation.
4. If the workpiece is a conductive body, the laser will cause electrons to flow into the workpiece, which causes a current flow. The current flow in the workpiece flows through the base electrode, through a current detector and through the power supply. When the current becomes zero, which indicates that the laser is generating positive ions, the power supply changes polarity (and polarity of the electric field). Goto, para. 0023 of translation.

5. Asahi teaches several systems to remove material removed from a workpiece during a laser-applied surface treatment of a workpiece. Para. 0004 of translation.

6. In one of the systems, depicted in Figure 2, the workpiece is placed in an electric field created by two electrodes and a power source. The material removed is drawn to one of the electrodes. Asahi, para. 008 of translation.

7. Asahi teaches that cleaning of the material is improved when the workpiece is in conduction, i.e., electrically connected to one of the electrodes. Asahi, para. 008 of translation.

ANALYSIS

Rejections under 35 U.S.C. § 102(b).

Appellants' arguments have not persuaded us of error in the Examiner's rejection of independent claim 9. Initially, we note that since Appellants' arguments discuss claims 9, 11, and 14 through 16 together and do not identify a reason why they are separately patentable, Appellants have grouped these claims together and we select claim 9 as representative of the group.

Appellants' arguments have not persuaded us that the Examiner erred in finding that both Goto and Asahi teach the workpiece being electrically interconnected to the current-voltage source as claimed. Claim 9 recites "the current-voltage source being interconnected between an electrically conductive workpiece and the electrode in such a way that the electric field is applied between the workpiece and the electrode." Thus, the scope of

claim 9 includes that there is a conductive workpiece, and that it is connected to the current voltage source. Claim 9 does not recite the method of connection between the workpiece and the current-voltage source. Thus, we do not consider the scope of claim 9 to be limited to a direct connection between the current-voltage source and conductive workpiece, and we decline to import such a limitation into the claim from the Specification.

We find that Goto teaches a power source to create an electric field in the vicinity of a workpiece. Fact 2. Goto teaches that the workpiece is conductive and that the workpiece is connected to the power source through contact with an electrode and a current meter. Fact 4. Further, Appellants' argument on page 2 of the Reply Brief that Goto does not teach an electric field between the workpiece and the electrode is not persuasive. As the workpiece is electrically connected to the lower electrode, it has the same charge and thus will create an electric field between the workpiece and the upper electrode. Thus, we find sufficient evidence of record to support the Examiner's finding that Goto teaches the interconnection between the current-voltage source and the workpiece as claimed.

We also find that Asahi teaches a power source to create an electric field in the vicinity of a workpiece. Fact 6. Asahi also teaches that the workpiece is in electrical conduction, i.e. electrically connected to the electrode (item 7) which is connected to the power supply. Fact 7. Appellants' argument on page 2 of the Reply Brief that Asahi does not teach an electric field between the workpiece and the electrode is not persuasive. As the workpiece is electrically connected to the lower electrode (item 7), it has the same charge and thus will create an electric field between the workpiece and the upper electrode. Thus, we similarly find sufficient

evidence of record to support the Examiner's finding that Asahi teaches the interconnection between the current-voltage source and the workpiece as claimed.

For the foregoing reasons, Appellants' arguments have not persuaded us of error in the Examiner's rejections of claims 9, 11, and 14 through 16 under 35 U.S.C. § 102(b), and we sustain these rejections.

Rejection under 35 U.S.C. § 103(a).

Appellants' arguments have not persuaded us that the Examiner erred in rejecting claim 13. Appellants argue that the rejection is in error for the reasons presented with respect to claim 9. As discussed *supra*, we do not find that the Examiner erred in rejecting claim 9. Accordingly, Appellants' arguments have not persuaded us of error in rejecting claim 13 and we therefore sustain the Examiner's rejection of that claim.

CONCLUSION

For the foregoing reasons, we sustain the Examiner's rejections of claims 9, 11, and 14 through 16 under 35 U.S.C. § 102(b) and of claim 13 under 35 U.S.C. § 103(a).

ORDER

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

Appeal 2008-1284
Application 10/798,116

AFFIRMED

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